



07/28/04 6454-68030-01 296852

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Keefer et al.

Application No. 10/789,194

Filed: February 26, 2004 Confirmation No. 6958

For: HYDROGEN RECYCLE FOR HIGH

TEMPERATURE FUEL CELLS

Examiner: Not yet assigned

Art Unit: 1746

Attorney Reference No. 6454-68030-01

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: MAIL STOP AMENDMENT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on the date shown below.

Attomey

for Applicant(s)

Date Mailed July 28, 2004

INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. § 1.97(b)(3)

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Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language documents. Also enclosed are copies of German Patent No. DE3913581 (in German), European Patent No. 0 751 045 (in German), European Patent No. 1 095 689 (in French), Japanese Patent No. 5166528 (in Japanese), Japanese Patent No. 62278770 (in Japanese), International Patent Publication No. WO 94/04249 (in French) and International Patent Publication No. WO 96/13871 (in German). English abstracts of each of these publications are provided. A full translation of Japanese Patent No. 62278770 is also provided. The English-language equivalents of German Patent No. DE3913581 (U.S. Patent No. 5,079,103, issued January 1992, Schram) and European Patent No. 1 095 689 (U.S. Patent No. 6,517,609, issued February 2003, Monereau et al.) are also cited. Applicants respectfully request that these documents be listed as references cited on the issued patent.

Applicants also note the following pending U.S. Patent Applications:

U.S. Patent Application No. 09/808,715 filed March 14, 2001, Keefer et al. (which corresponds to Publication No. US-2002-0004157, cited on the attached form PTO-1449);

U.S. Patent Application No. 10/039,552 filed Oct. 16, 2001, Keefer et al. (which corresponds to Publication No. US-2002-0098394, cited on the attached form PTO-1449);

U.S. Patent Application No. 10/039,940 filed Oct. 16, 2001, Keefer et al. (which corresponds to Publication No. US-2002-0142208, cited on the attached form PTO-1449);

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U.S. Patent Application No. 10/039,491 filed Oct. 16, 2001, Keefer et al. (which corresponds to Publication No. US-2002-0104518, cited on the attached form PTO-1449):

U.S. Patent Application No. 10/013,896 filed Dec. 7, 2001, Connor et al. (which corresponds to

Publication No. US-2002-0127442, cited on the attached form PTO-1449):

U.S. Patent Application No. 10/043,727 filed Jan. 9, 2002, Keefer et al. (which corresponds to

Publication No. US-2002-0112479, cited on the attached form PTO-1449):

U.S. Patent Application No. 10/286,400 filed Nov. 1, 2002, Keefer et al. (which corresponds to

Publication No. US-2003-0157390, cited on the attached form PTO-1449);

U.S. Patent Application No. 10/352,361 filed Jan. 27, 2003, Keefer et al. (which corresponds to

Publication No. US-2003-0143448, cited on the attached form PTO-1449); and

U.S. Patent Application No. 10/389,541 filed March 14, 2003, Keefer et al. (which corresponds

to Publication No. US-2004-0005492, cited on the attached form PTO-1449);

U.S. Patent Application No. 10/671,750 filed September 26, 2003, Keefer et al. (which

corresponds to Publication No. US-2004-0131912, cited on the attached form PTO-1449);

Applicants filed this Information Disclosure Statement ("IDS") before the mailing date of a

first Office action on the merits. As a result, no fee should be required to file this IDS. However, if

the Patent Office determines that a fee is required for Applicants to file this IDS, please charge any

such fees, or credit overpayment, to Deposit Account No. 02-4550. A duplicate copy of the

transmittal sheet for this IDS is enclosed.

The filing of this IDS shall not be construed to be an admission that the information cited in

the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37

C.F.R. §1.56.

Respectfully submitted,

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PATENT Attorney Reference Number 6454-68030-01

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TRANSMITTAL LETTER

Enclosed for filing in the application referenced above are the following:

X Information Disclosure Statement Form 1449 and copies of references cited thereon

 \boxtimes The Director is hereby authorized to charge any additional fees that may be required, or credit over-payment, to Deposit Account No. 02-4550. A copy of this sheet is enclosed.

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Docketing cc:

Attorney Docket Number	6454-68030-01
Application Number	10/789,194
Filing Date	February 26, 2004
First Named Inventor	Keefer
Art Unit	1746
Examiner Name	Not yet assigned

U.S. PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
		2001/047824	December 2001	Hill et al.
		2002/0004157	January 2002	Keefer et al.
		2002/0098394	July 2002	Keefer et al.
		2002/0104518	August 2002	Keefer et al.
		2002-0110503	August 2002	Gittleman et al.
		2002/0110504	August 2002	Gittleman et al.
		2002-0112479	August 2002	Keefer et al.
		2002/0127442	September 2002	Connor et al.
		2002/0142198	October 2002	Towler et al.
		2002-0142208	October 2002	Keefer et al.
		2002/0143448	July 2003	Keefer
		2003-0157390	August 2003	Keefer et al.
		2004-0005492	January 2004	Keefer et al.
		2004-0131912	July 2004	Keefer et al.
		3,094,569	June 1963	Thomas
		3,204,388	September 1965	Asker
		3,430,418	March 1969	Wagner
		3,513,631	May 1970	Siebert et al.

EXAMINER SIGNATURE:

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

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U.S. PATENT DOCUMENTS

Examiner's	Cite No.		S. TATENT DOCUMENTS	
Initials*	(optional)	Number	Publication Date	Name of Applicant or Patentee
		3,564,816	December 1968	Batta
		3,594,984	July 1971	Toyama et al.
		3,847,672	November 1974	Trocciola et al.
		3,865,924	February 1975	Gidaspow et al.
		4,019,879	April 1977	Rabo et al.
		4,144,037	March 1979	Armond et al.
		4,153,434	May 1979	Settlemyer
		4,200,682	April 1980	Sederquist
		4,272,265	June 1981	Snyder
		4,322,394	March 1982	Mezey et al.
		4,354,859	October 1982	Keller et al.
		4,406,675	September 1983	Dangieri et al.
		4,452,612	June 1984	Mattia
		4,530,705	July 1985	Firey
		4,553,981	November 1985	Fuderer
		4,555,453	November 1985	Appleby
		4,578,214	March 1986	Jungerhans
		4,587,114	May 1986	Hirai et al.

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U.S. PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
		4,595,642	June 1986	Nakanishi et al.
		4,696,682	September 1987	Hirai et al.
		4,702,903	October 1987	Keefer
		4,726,816	February 1988	Fuderer
		4,743,276	May 1988	Nishida et al.
		4,758,253	July 1988	Davidson et al.
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		4,781,735	November 1988	Tagawa et al.
		4,783,433	November 1988	Tajima et al.
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		4,914,076	April 1990	Tsuji et al.
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		4,963,339	October 1990	Krishnamurthy et al.
		4,968,329	November 1990	Keefer
		4,969,935	November 1990	Hay
		4,988,580	January 1991	Ohsaki et al.
		5,068,159	November 1991	Kinoshita

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Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
	-	5,079,103	January 1992	Schramm
		5,082,473	January 1992	Keefer
		5,096,469	March 1992	Keefer
		5,096,470	March 1992	Krishnamurthy
		5,126,310	June 1992	Golden et al.
		5,133,784	July 1992	Boudet et al.
		5,147,735	September 1992	Ippommatsu et al.
		5,217,916	December 1993	Vanderborgh et al.
		5,227,598	July 1993	Woodmansee et al.
		5,246,676	September 1993	Hay
		5,248,325	September 1993	Kagimoto et al.
		5,256,172	October 1993	Keefer
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		5,258,571	November 1993	Golden et al.
		5,271,916	December 1993	Vandenborgh et al.
		5,282,886	February 1994	Kabayashi et al.
		5,360,679	November 1994	Buswell et al.
		5,366,818	November 1994	Wilkinson et al.

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Examiner's	Cite No.	Number	Publication Date	Name of Applicant or Potentee
Initials*	(optional)	Number	Fublication Date	Name of Applicant or Patentee
		5,393,326	February 1995	Engler et al.
		5,411,578	May 1995	Watson et al.
		5,415,748	May 1995	Emiliani et al.
		5,429,665	July 1995	Botich
		5,431,716	July 1995	Ebbeson
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		5,434,016	July 1995	Benz et al.
		5,441,559	August 1995	Petit et al.
		5,487,775	January 1996	LaCava et al.
		5,509,956	April 1996	Opperman et al.
		5,523,326	June 1996	Dandekar et al.
		5,529,763	June 1996	Peng et al.
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		5,531,809	July 1996	Golden et al.
		5,543,238	August 1996	Strasser
		5,593,478	July 1997	Hill et al.
		5,604,047	February 1997	Bellows et al.
		5,632,807	May 1997	Tomita et al.

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		5,645,950	July 1997	Benz et al.
		5,646,305	July 1997	Wagner et al.
		5,656,067	August 1997	Watson et al.
		5,658,370	August 1997	Vigor et al.
		5,711,926	January 1998	Knaebol
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		5,766,311	June 1998	Ackley et al.
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		5,981,096	November 1999	Hornberg et al.
		5,998,056	December 1999	Divisek et al.
		6,022,399	February 2000	Ertl et al.
		6,051,050	April 2000	Keefer et al.
		6,060,032	May 2000	Hable et al.
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		6,077,620	June 2000	Pettit
		6,090,312	July 2000	Ziaka et al.
		6,143,057	November 2000	Bülow et al.
		6,162,558	December 2000	Borup et al.
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		6,190,623	February 2001	Sanger et al.
		6,190,791	February 2001	Hornburg
		6,200,365	January 2001	Eimer et al.
		6,210,822	March 2001	Abersfelder et al.
		6,231,644	May 2001	Jain et al.
		6,255,010	July 2001	George et al.
		6,200,365	January 2001	Eimer et al.

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		6,283,723	September 2001	Milburn et al.
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		6,296,823	October 2001	Ertl et al.
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		6,398,853	April 2002	Keefer et al.
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	·	Canada	1,256,038	June 1989	Bowie G. Keefer
		Canada	2,016,045	August 1994	Bowie G. Keefer
		Canada	2,087,972	January 2000	Questor Industries, Inc.
		Canada	2,087,973	January 2001	QuestAir Technologies, Inc.
		Canada	2,109,055	February 1999	Bowie G. Keefer
		Canada	2 325 072	April 2002	QuestAir Technologies, Inc.

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Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant, Patentee or Inventor
		Germany	DE 3913 581	November 1990	Bowie G. Keefer
		Europe	EP 0 143 537	March 1990	Bowie G. Keefer
		Europe	EP 0 341 189	August 1989	International Fuel Cells Corporation
	-	Europe	EP 0 345 908	December 1989	KTI Group B.V.
		Europe	EP 0 681 860	July 1996	The BOC Group, Inc.
		Europe	EP 0 691 701	October 1996	Ishikawajima-Harima Heavy Industries Co., Ltd.
		Europe	EP 0 737 648	October 1996	Air Products & Chemicals, Inc.
		Europe	EP 0 750 361	December 1996	Exxon Research and Engineering Company
		Europe	EP 0 751 045	January 1997	Daimler Benz AG (DE)
		Europe	EP 0 853 967	July 1998	The BOC Group, Inc.
		Europe	EP 1 070 531	January 2001	The BOC Group, Inc.
		Europe	EP 1 095 689	October 1999	Air Liquide
		Europe	EP 1 172 772	January 2001	Azkoyen Medios de Pago, S.A.
		Britain	GB 2 042 365	September 1980	BOC Limited
		Japan (Abstract)	JP 10325360 A	December 1998	Yoshio Kurosawa
		Japan (Abstract)	JP 11214021	August 1999	Ishikawajima-Harima Heavy Industries Co., Ltd.; ONDA
		Japan (Abstract)	JP 5166528 A	October 1993	Mitsubishi Electric Corp.
		Japan (Abstract)	JP 59075574 A	April 1984	Nippon Kihatsuyu KK

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			OREIGNIATENI		
Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant, Patentee or Inventor
		Japan (Abstract)	JP 62274561	November 1978	Mitsubishi Heavy Ind. Ltd.
		Japan	JP 62278770	December 1987	Nippon Kokan Co.
		Japan (Abstract)	JP 63034862	February 1998	Mitsubishi Electric Corp.
		Japan (Abstract)	JP 63166157	July 1988	Tokyo Tungsten KK
		Japan (Abstract)	JP 7094200	July 1995	Osaka Gas Co. Ltd; others
		Japan (Abstract)	JP 8045526	February 1996	Ishikawajima-Harima Heavy Industries Co., Ltd.
		WIPO/PCT	WO 94/04249	August 1992	Jacques Ribesse
		WIPO/PCT	WO 96/13871	May 1996	Siemens AG
		WIPO/PCT	WO 98/29182	September 1998	Bowie Keefer
		WIPO/PCT	WO 99/28013	June 1999	Questor Industries, Inc.
	·	WIPO/PCT	WO 99/46032	September 1999	Hydrogen Burner Technology, Inc.
		WIPO/PCT	WO 00/16425	March 2000	Questor Industries, Inc.
		WIPO/PCT	WO 00/16880	March 2000	ALLIEDSIGNAL Inc.
		WIPO/PCT	WO 00/76630	December 2000	QuestAir Technologies, Inc.
		WIPO/PCT	WO 01/47050	June 2001	Ballard Power Systems Inc.
		WIPO/PCT	WO 02/24309	March 2002	QuestAir Technologies, Inc.
		WIPO/PCT	WO 02/35623	May 2002	QuestAir Technologies, Inc.
		WIPO/PCT	WO 02/37590	May 2002	QuestAir Technologies, Inc.

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		WIPO/PCT	WO 02/45821	June 2002	QuestAir Technologies, Inc.	
		WIPO/PCT	WO 02/47797	June 2002	QuestAir Technologies, Inc.	
		WIPO/PCT	WO 02/56400	July 2002	QuestAir Technologies, Inc.	
		WIPO/PCT	WO 2004/030130	April 2004	QuestAir Technologies, Inc.	
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS				
		"Fuel Cells For Transportation 98," National Laboratory Annual Progress Report (1998), U.S. Department of Energy, Office of Advanced Automotive Technologies, "CO Clean-up R&D", Argonne National Laboratory, pp. 33-36				
Carvill et al., <i>ÁIChE J.</i> 42(10):2765-2772, 1996						
		Ding et al., Chemical Engineering Science 55:3461-3474, 2000				
	-	Ding et al., Chemical Engineering Science 55:3929-3940, 2000 Iyuke et al., Chemical Engineering Science 55:4745-4755, 2000				
	International Search Report from International Application No. PCT/CA99/00823					
International Search Report from International Application No. PCT/CA02/00368				PCT/CA02/00368		

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